



Foreign Agricultural Service

GAIN Report

Global Agriculture Information Network

Required Report - public distribution

Date: 8/16/2001

GAIN Report #CH1035

China, People's Republic of

Tree Nuts

Annual - Walnuts

2001

Approved by:

Larry Senger

U.S. Embassy

Prepared by:

Zhang JianPing and Adam Branson

Report Highlights:

Walnut production in China for MY 2000 has been revised to 310,000. Similar production levels are expected in MY 2001. This is primarily due to the bearing cycle of tree nuts. Chinese walnut exports continue to expand. Chinese tree nut scientists and researchers are eager to cooperate with American tree nut scientists and traders.

Includes PSD changes: Yes

Includes Trade Matrix: No

Annual Report

Beijing [CH1], CH

SUMMARY

Tree nuts are considered an economic forest crop in China. In 1991, the amount of land planted to economic forests was 917,533 hectares. The amount of land planted to economic forests is expected to have reached 1.53 million hectares at the end of 2001. Next year, in 2002, planting area for economic tree crops is expected to reach 1.6 million hectares. The estimate for combined large and small scale walnut production area is over 600,000 hectares. Scientists and other industry experts estimate that walnut trees will be planted on just over half of the newly converted economic forestry land. This amounts to additional annual growth of 33,000 hectares of land planted to walnuts each year. This is expected to last through China's Tenth Five Year Plan (2001-2006) and into China's Eleventh Five Year Plan (2006-2011).

China's walnut production has increased for the last several years because of increased planting and bearing acreage; improved walnut varieties; and better tree management. Walnut production in MY 2000 surpassed post estimates. This was primarily due to the bearing cycle of walnut trees in Southern China and favorable weather conditions. Walnut production is not expected to increase sharply in MY 2001 or MY 2002. This is due to unfavorable weather conditions and the downturn in the bearing cycle of walnut trees. Post expects MY 2001 production to be around 310,000 MT. Similar production levels should be expected in MY 2002, as well.

Most walnut consumption occurs in the first few months after production. It is estimated that 75 to 80 percent of domestically produced walnuts are sold raw each year to individual consumers. There is another estimated 10 to 15 percent of walnuts sold to processors. It is expected, however, that as Chinese companies refine processing technology processed walnuts will gain some ground in domestic sales. For the last few year, walnut exports have accounted for 10 percent of production. Any amount of walnut production that is neither consumed nor exported is crushed for home cooking oil.

By volume, Chinese walnut exports continue growing. As a percentage of production, however, walnut exports are stable. Traders have mixed sentiments regarding whether or not growing domestic consumption will have a negative impact on China's ability to export walnuts in the future. Traders report that China's market share of the international walnut trade is shrinking. This is because of increased worldwide production and exports from regional competitors; particularly India.

Chinese scientists and researchers are anxious to work with American counterparts to produce better quality walnut stock. These scientists welcome exchanges and projects that would lead to the cooperation in the development of new walnut varieties. Many scientists have expressed an interest in importing more walnut tree seedlings. There has been exceptional interest in trial varieties of other tree nut seedlings; namely Pecans. Scientists, traders, and processing companies are also interested in any improvements to walnut and other tree nut shelling operating equipment.

PRODUCTION

PSD Table						
Country	China, Peoples Republic of					
Commodity	Walnuts, Inshell Basis				(HA)(1000 TREES)(MT)	
	Revised	1999	Preliminary	2000	Forecast	2001
	Old	New	Old	New	Old	New
Market Year Begin		10/1999		10/2000		10/2001
Area Planted	320000	600000	620000	633000	640000	666000
Area Harvested	172000	400000	425000	430000	455000	463000
Bearing Trees	0	0	0	0	0	0
Non-Bearing Trees	0	0	0	0	0	0
Total Trees	0	0	0	0	0	0
Beginning Stocks	0	0	0	0	0	0
Production	260000	274246	300000	310000	300000	310000
Imports	700	2582	4000	500	0	1000
TOTAL SUPPLY	260700	276828	304000	310500	300000	311000
Exports	31000	29398	31000	32500	0	33000
Domestic Consumption	229700	247430	273000	278000	300000	278000
Ending Stocks	0	0	0	0	0	0
TOTAL DISTRIBUTION	260700	276828	304000	310500	300000	311000

[Note: The ratio used for converting walnut trade volume from a shelled or a packaged basis to an in-shell basis is 1:3]

Tree nuts are considered an economic forest crop in China. Walnut trees account for the largest portion of economic forest tree nut trees. In 1991, the amount of land planted to economic forests was 917,533 hectares. Now, ten years later, the amount of land planted to economic forests is expected to reach 1.53 million hectares. Planting area for economic crops in 2002 is expected to increase to 1.6 million hectares. Through national campaigns called "Grains for Green" and "Returning Farmlands to Grasslands and Forests" China will continue to accelerate the amount of land planted to economic forests. These policies are discussed further in the policy section of this report.

There are no separate government published statistics for the total amount of economic crop area that is planted to walnuts. The estimate for combined large and small scale walnut production area is over 600,000 hectares. Scientists and other industry experts estimate that walnut trees will be planted on just over half of the newly converted economic forestry land. This amounts to additional annual growth of 33,000 hectares of land planted to walnuts each year. Much of this growth will continue through the end of China's Tenth Five Year Plan and possibly to the end of China's Eleventh Five Year Plan (2006-2011).

Scientists and experts are working on hybrid variety trees that deliver: earlier arrival walnuts by

two to four weeks; five to ten more kilograms of walnuts per year on trees between six and ten years old; better quality shells with better class walnut meats; shorter trees that are easier to harvest; and more drought resistance. Of the walnut trees in China, one-third are between the ages of 1 year to 10 years. Another third of the trees are between the age of 11 years to 50 years. The final third of trees are between the ages of 51 years to 100 years.

Many sources report that China plants over 50 varieties of walnut trees. Walnuts produced in Southern China are often one of two species (*J. Sigillata* Dode and *J. Regia* L.) or grafts of the two. Southern Chinese walnut trees, like tiehetao and paohetao, are often at elevations between 1600 meters to 2400 meters above sea level. One variety, yuanbolouhetao, is planted at altitudes above 2400 meters above sea level. North American walnut trees have been put under trial planting in these areas. However, compared to local varieties, the resultant North American trees are dwarfed and require a longer time to come into commercial production. Walnut trees in Northern and Western China are similar to walnut species commonly found in North America. Northern Chinese walnuts, like xilinhetao #1 and xilinhetao #2 are planted from 1300 meters to 1500 meters above sea level. The variety xilinhetao #3 is planted above 1500 meters. There are other varieties of walnuts that are planted at altitudes around 500 meters above sea level.

There are five principal growing areas for walnuts in China. These areas are in mountain ranges and valleys that span across several provinces in the central Southern and central Northern parts of China. From South to North, the areas are the Yungui Mountainous Area Plateau (Yunnan and Guizhou), Qingba Mountainous Area (Sichuan and Shaanxi), Taihang Mountainous Area (Henan, Hebei, and Shaanxi), Luliang Mountainous Area (Shanxi), and Yanshan Mountainous Area (Hebei and Beijing).

Walnut Production by Province, 1996-2000 (Metric Tons)					
Province	1996	1997	1998	1999	2000*
Total	237,989	249,834	265,121	274,246	310,000
Yunnan	55,448	58,709	57,168	60,452	
Shanxi	34,236	37,376	40,365	39,724	
Shaanxi	30,433	26,222	32,519	33,340	
Hebei	21,742	27,905	29,441	30,365	
Sichuan	27,720	23,409	28,711	23,842	
Xinjiang	6,695	7,213	8,362	15,779	
Gansu	19,912	17,064	18,423	10,612	
Henan	13,534	12,898	12,248	13,428	
Shandong	8,244	11,521	10,403	9,474	
Others	20,025	27,517	27,481	37,230	
*2000 Individual Province Production data unavailable					
Source: National Statistics Bureau					
f:/shared/lotus/walnut/annuals/01provdpd.wk4					

Most walnut production occurs on small plots of land. Prior to this year, on small plots of land the State Forestry Administration (SFA) planted an average of 10 to 15 walnut trees per mu (15 mu equal one hectare). The SFA has determined that planting capacity can be increased. Beginning this year, the SFA provides at least 30 trees per mu of land converted from crop land to walnut production (around 450 trees per hectare). Seedlings are planted in rows. The newly planted seedlings are often hybrid grafts that come from domestic breeding stock developed by one of several Chinese research institutes.

China's walnut production has increased for the last several years because of increased planting and bearing acreage; improved walnut varieties; and better tree management. However, walnut production is not expected to increase sharply in MY 2001 or MY 2002. One reason is that the production bases in Yunnan province reached the peak year of their production cycles in MY 2000. Also, Yunnan's largest production area, Yangbi, suffered from some drought in early Spring. Yunnan walnut production has also slightly suffered from a wood pest. Another reason is that although the production areas in Shaanxi, Shanxi, and Hebei were to experience their peak production year in 2001, the provinces were hit by a freeze during the period when walnut trees were blooming. The end result is that post expects 2001 production to be around 310,000 MT; about the same as production in 2000.

It is estimated that eighty-five percent of walnut production and harvesting is completed by private family households. Households contract the land from the local government for various term lengths. In mountainous area production bases, much of the contracted land had pre-existing walnut trees for soil erosion prevention. During walnut harvest, walnut growers join together, moving from farm to farm, until all of the harvest is completed. Each grower then keeps the walnuts grown from trees grown on their contracted land. The remaining production and harvest is done by collective or state owned farms. Government production figures are calculated based upon the amount private family households and other farms report. These annual production numbers do not include the walnuts farmers keep, give as gifts, or hide from taxable production.

Chinese scientists and researchers are anxious to work with American counterparts to produce better quality walnut stock. These scientists welcome exchanges and projects that would lead to the cooperation in the development of new walnut varieties. Many scientists have expressed an interest in importing more walnut tree seedlings. Post feels it is important to note that the importation process for tree seedlings is lengthy and very difficult. There has been exceptional interest in trial varieties of other tree nut seedlings; namely Pecan tree seedlings.

CONSUMPTION

Most walnut consumption takes place in walnut areas of production. The exception is that as walnut demand increases in some urban areas or during holidays like Chinese mid-Autumn festival, provincial trade increases to meet growing domestic consumption. Significant import increases to meet domestic demand are not likely to materialize because harvest is completed near or during this festival.

Most walnut consumption occurs in the first few months after production. It is estimated that 75 to 80 percent of domestically produced walnuts are sold raw each year to individual consumers. There is another estimated 10 to 15 percent of walnuts sold to processors. It is expected, however, that as Chinese companies refine processing technology, processed walnuts will gain some ground in domestic sales. Another 10 percent of walnut production is exported. Any amount neither consumed nor exported at the end of the market year is crushed for home cooking oil.

Chinese companies are still improving processing technology. Several production bases and walnut traders have expressed an interest in any new innovations to walnut cracking technology. Many traders, however, feel that western designed walnut shelling machines damage Chinese walnut meats. This is because most Chinese walnuts are not as uniform in size as North American walnuts.

Walnuts are most often bought in-shell and cracked by hand. Middle-aged and elderly consumers account for the largest share of walnut consumption in China. These age groups primarily consider walnuts a health food. As the incomes of middle-aged consumers rise, the health food industry continues to grow. These middle-aged and elderly consumers often like to peel the skin off of fresh walnut meats and eat the remaining walnut meat. The remaining walnut meat resembles Cauliflower florets in appearance and taste. Consumers believe the fresh walnut meat skin is bitter and leads to stomach discomfort

Young children also consume walnuts as a snack food. Also, as incomes rise, more parents buy snack foods for their children. This consumption group also eats more packaged, sweetened and seasoned walnuts. Walnuts are often sweetened with honey, roasted, and seasoned with sesame seeds or other mild flavors. These walnut meats are sold in bulk or in 300 gram, 500 gram, or 600 gram packages.

It is believed that young adult and low income sectors consume a very small percentage of walnuts. Low income earners who live in mountainous walnut production areas take year-old walnuts to crushers for oil. The resulting oil is used as home cooking oil. Many of the walnut growers keep walnuts for this exact purpose.

Price

This year, walnut growers in Yunnan province expect a procurement price of 11 RMB per kilogram in-shell walnuts from processing companies (8.265 RMB equals 1 USD). Procurement prices are similar in other parts of China. The domestic retail prices for in-shell walnuts varies. Prices can be as low as 3 RMB per kilogram to as high as 20 RMB per kilogram. Domestic retail prices for shelled walnuts varies from 22 RMB to 50 RMB per kilogram. If in-shell or shelled walnuts have been kept in cold storage, retailers add between 0.60 RMB to 2.0 RMB per kilogram to the sale price. The prices for in-shell and shelled walnuts are regulated by the market and industry standards of classification.

In-shell walnuts prices are judged by the shell size (in descending order: large, medium, small), shell color (light, tan, dark), shell thickness (thin or thick), expected meat size (large, medium,

small), expected meat color (light, tan, dark), freshness, taste and fragrance. Shelled walnut prices are judged by meat size (large, medium, small), meat color (light, tan, dark), freshness, how intact meat portions are (wholes, halves, quarters, bits, meal), taste and fragrance.

Individual consumers prefer walnuts that are fresher, but also consider shell thickness. It seems individual consumers are willing to pay more for fresher walnuts and walnuts with thinner shells. Processing companies often consider freshness, color, and customers order requirements. Companies often prefer older nuts because the meats are more oily and fragrant. With older nuts, however, the risk of breaking the walnut meat (and reducing sales value) is greater so companies soak the shells in a water solution before cracking the shells. Processing companies turn these nuts into different items such as seasoned or unseasoned nuts in tins, porridge powders, and drinks. Companies may also export them to other provinces in China where prices are higher.

TRADE

The trade data under imports and exports in the production, supply, and demand table at the beginning of this report includes direct trade and Hong Kong external trade. However, the trade tables, in this section, only include the direct imports of in-shell and shelled walnuts along with direct exports of in-shell, shelled, and packaged walnut meats.

Direct imports and exports represent goods that are recorded as imports or exports by Chinese Customs. Hong Kong external trade represents goods recorded by Hong Kong Customs with country of origin and country of consignment outside of Hong Kong. Much of the trade recorded by Hong Kong Customs as external trade to or from China is not recorded by China Customs as imports or exports, indicating that this external trade enters and departs mainland China through gray channels. In past years, there was a significant amount of gray channel trade. As China becomes aware of the lost tariff and trade revenue of these goods, customs channels are tightening. The amount of trade for all walnut goods under Hong Kong external trade is significantly less this year.

Imports

Chinese walnut imports have decreased. However, one trend surfacing is an increase in the number of imported walnuts with Chinese origin.

This occurs when a company within a special economic or special trading zone may have purchased walnuts from a production base within China. Then, a Chinese importing company may purchase walnuts from this company. The company then sends the walnuts from the production base to the procurer and the paperwork gets routed through these special zones.

In-shell Walnut Imports by Origin, MY 1999 and MY 2000 (Metric Tons)										
Country	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	MY	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	MY to
	1999	2000	2000	2000	Total	2000	2001	2001	2001	Date

China	0	0	0	0	0	0	0	260		260
Germany	0	0	0	0	0	0	40	0		40
United States	0	223	469	40	732	0	0	20		20
Other	0	0	0	0	0	0	0	13		13
Total	0	223	469	40	732	0	40	292		332

Source: China Customs Data
(HS Code: 0802.3100)
f:/shared/lotus/walnut/annuals/01/inshim.wk4

Shelled Walnut Imports by Origin, MY 1999 and MY 2000 (Metric Tons)										
Country	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	MY	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	MY to
	1999	2000	2000	2000	Total	2000	2001	2001	2001	Date
Vietnam	0	0	0	0	0	0	0	12		12
Kyrgyzstan	0	0	0	0	0	0	7	0		7
North Korea	0	0	0	0	0	0	0	6		6
United States	1	5	8	0	15	0	4	0		4
China	1	1	0	0	2	0	0	0		0
Australia	0	0	2	0	2	0	0	0		0
Other	0	0	1	4	4	2	0	0		2
Total	2	6	11	4	23	2	11	19		32

Source: China Customs Data
(HS Code: 0802.3200)
f:/shared/lotus/walnut/annual/01/shim.wk4

Exports

By volume, Chinese walnut exports continue growing. As a percentage of production, however, walnut exports are stable. Traders have mixed sentiments regarding whether or not growing domestic consumption will have a negative impact on China's ability to export walnuts in the future. Traders report that China's market share of international walnut trade is shrinking. Chinese traders feel this is because of the increased production and exports from regional competitors; particularly India.

In-shell Walnut Exports by Destination, MY 1999 and 2000 (Metric Tons)										
Country	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	MY	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	MY to
	1999	2000	2000	2000	Total	2000	2001	2001	2001	Date

North Korea	248	692	43	0	984	260	200	0		460
Lebanon	430	196	56	0	682	164	173	83		419
U. Arab. Emir.	106	0	0	20	126	154	57	10		221
Hong Kong	15	18	2	3	37	41	12	0		53
Bahrain	40	0	0	0	40	20	0	0		20
Germany	310	0	0	0	310	10	0	0		10
Other	29	36	41	38	144	81	96	48		225
TOTAL	1,179	942	141	60	2,323	731	538	141		1,409

Source: China Customs Data

(HS Code: 0802.3100)

f:/shared/lotus/walnut/annuals/01/inshex.wk4

Shelled Walnut Exports by Destination,
MY 1999 and 2000 (Metric Tons)

Country	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	MY	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	MY to
	1999	2000	2000	2000	Total	2000	2001	2001	2001	Date
United Kingdom	362	1,124	708	0	2,194	142	1,153	1,178		2,473
Canada	0	555	341	0	896	68	753	743		1,565
Japan	304	648	191	18	1,160	221	893	378		1,491
France	60	451	81	44	636	86	390	111		587
Australia	64	205	190	69	528	59	216	215		490
Hong Kong	578	180	127	97	983	154	133	71		358
Germany	11	434	24	1	470	0	217	46		263
North Korea	97	103	100	18	318	178	69	0		247
Lebanon	129	43	10	0	182	120	73	10		203
Saudi Arabia	30	7	0	0	37	129	40	30		199
Netherlands	70	36	20	0	126	100	56	0		156
United States	1	33	0	0	34	0	49	80		129
New Zealand	22	32	34	0	88	16	56	53		124
Singapore	61	20	12	6	98	33	26	29		88
Taiwan	0	9	1	0	11	44	41	2		87
Spain	20	10	0	0	30	27	0	20		47
Other	77	62	75	3	217	312	261	293		865
Total	1,884	3,953	1,913	256	8,006	1,688	4,425	3,259		9,372

Source: China Customs Data
(HS Code: 0802.3200)
f:/shared/lotus/walnut/annuals/01/shex.wk4

Packaged Walnut Meat Exports by Destination,
MY 1999 and MY 2000 (Metric Tons)

Country	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	MY	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	MY to
	1999	2000	2000	2000	Total	2000	2001	2001	2001	Date
Germany	90	217	15	179	500	110	189	146		445
Japan	5	37	20	19	81	0	21	22		43
Others	5	15	5	12	38	0	22	5		27
Total	100	269	41	210	619	110	232	173		516

Source: China Customs Data
(HS Code: 2008.1910)
f:/shared/lotus/walnut/annuals/01/walmeex.wk4

Tariffs

The tariff for walnuts has been lowered. The MFN tariff rate for in-shell walnuts is 29 percent. The preferential tariff rate for shelled walnuts is 28 percent. The preferential tariff rate for packaged walnut meats is 28 percent, also.

Tariff rates for in-shell walnuts are scheduled to be lowered to 25 percent over the next several years. Tariff rates for shelled walnuts and walnut meats are scheduled to be lowered to 20 percent. The schedule for reductions is not available.

STOCKS

Official sources report that nearly the entire walnut crop is consumed each year. Most of the walnut crop is consumed within the first few months of production. Although walnuts are easy to store, stocking walnuts for domestic consumers is cost prohibitive. Processors, however, may store walnuts for their own production purposes.

Cold storage costs for walnuts, and like products, is around 70 RMB (8.265 RMB equals 1 USD) per metric ton per month. Retail walnut sellers often add 0.60 RMB to 2 RMB per kilogram to the price of in-shell or shelled walnuts kept in cold storage. Retailers mention that native Chinese are unwilling to pay this excessive price and that foreign visitors are usually the end consumers.

POLICY

The State Forestry Administration (SFA), at the national level, has guaranteed walnut growers to

provide better breeding stock and to develop technology for grafting trees. In environmentally suitable areas, the national level SFA will provide walnut seedlings or other tree nut seedlings to farmers who return crop lands to forests and grasslands. Under the nationwide program, "Returning Farmlands to Forests and Grasslands" campaign, farmers can receive 60 RMB from each level of government at the national, provincial, and prefecture levels (180 RMB in total). There is also the "Grain for Green Project" that provides 150 kilograms of grain and another 60 RMB to 70 RMB (8.265 RMB equals 1 USD) cash to farmers who return farmland to forest and/or grassland. This money is usually for buying trees or pocket money.

Under these national policies, farmers return marginal yielding crop land or stressed land to forests and grasses. Crop land that is on a 25 degree or greater slope is also expected to be returned to forests and grasslands. The SFA stresses that farmers are the ultimate arbiter of what land and what varieties of trees and grasses are planted. The SFA and other government authorities will provide guidelines to farmers about environmentally suitable trees and grasses. In these newly returned areas, farmers are eager to plant economic tree crops that will bear nuts or fruits. Farmers are also more eager to plant walnut trees because the trees require less labor and have cheaper inputs than fruit trees. Also, in between the newly planted trees, farmers plant suitable types of grasses such as forage grasses or erosion control grasses. Sometimes these grasses are plowed under to improve soil composition. In other instances, farmers may plant vegetables and cash crops.

Other production costs like fertilizer and water are not subsidized by the national government, but by the province or prefecture. Several provinces have their own policies for supporting both traditional walnut growers and these newly converted walnut growers. For example, traditional walnut growers can receive between 30 RMB to 80 RMB for seedlings, fertilizer, plastic sheeting and technical assistance. Usually, farmers who plant walnut seedlings on their land also receive a tax break for the first three years of walnut production. This is viewed as the period from when walnuts first appear on a tree to until the tree reaches commercial level production. Provinces and prefectures also provide training and technical assistance. Technical assistance, for all growers, consists of tree grafting education and drought management.